Message

From: North, Alexis [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=D24E261D2C5F490AA1247230E6198B94-NORTH, ALEXIS]
Sent: 6/11/2019 6:29:03 PM
To: Semerad, Jim L. [jsemerad@nd.gov]
Subject: RE: Air Pollution Tests

If we need to add this guy's backyard to the list of inspections in September I'm happy to pick out NSPS OOOOa wells and companies in his area.

Alexis North, Environmental Scientist
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From: Semerad, Jim L. <jsemerad@nd.gov>
Sent: Tuesday, June 11, 2019 12:26 PM
To: Fritz, Peter <peter.fritz@und.edu>
Subject: RE: Air Pollution Tests

Mr. Fritz:

See answers below in red text. I hope this information helps with your concerns.

Jim Semerad

From: Fritz, Peter <Ex. 6 Personal Privacy (PP)
Sent: Monday, June 10, 2019 2:28 PM
To: Semerad, Jim L. <jsemerad@nd.gov>
Subject: Re: Air Pollution Tests

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Mr. Semerad,

As always, thank you for the response.

1) I monitor Dickinson ambient air quality hourly using Breezometer, Weatherbug and AQI. Consistently it has been above 50 ppb, which is about the same as Bismarck and Fargo. This is obviously suspicious because we are a smaller urban area. Our Ozone doesn't cost me sleep. I am concerned about Methane, Benzene and Formaldehyde concentrations. How do I get these levels tested in Dickinson. Why aren't these levels tested annually to the North and West of me. These counties are in Purple (Threat Radius Map). EPA and various groups continue to study what the "background" concentration is for ozone. Background concentrations are the result of various things including the "Mother Nature" component that I have discussed in earlier emails. In any case, due to the characteristics of ozone, similar numbers across the state are not considered "suspicious". The

reason we added another monitor in the Bakken was to proactively check if problems may exist; we have been pleased that the required pollution control is working. The same pollution control that controls VOCs also works for other pollutants like methane, benzene, etc. Based on our field inspections, and then confirmed by the EPA OAQPS field testing (that I discussed in prior emails), we have seen and are seeing success in those areas as well.

2) When did the inspections take place? From my research oil and gas companies are notoriously negligent, if allowed to be. Also from my research, North Dakota allows them to be. Those inspections took place in June of 2018. ND took advantage of the opportunity to have concentrations measurements by requesting that the OAQPS team spend additional time in the Bakken; they worked long hours (10-12 hour days), 7 day weeks, and supplied extensive maps ahead of the trip to allow for less downtime while they were here. Note that OAQPS remarked that ND was some of the most efficient testing that they've conducted (and they have been to most oil producing states in the country).

3) Doesn't the DEQ want an interpretation of the Threat Map, which is based on EPA numbers? The Threat Map you reference appears to be a map created by Ecowatch where an arbitrary ½-mile radius is drawn around each oil and gas source (oil wells, compressor stations, etc.) without regard to facility specifications, emissions, etc. This is then referred to by Ecowatch as a "health threat radius" (a term created by Ecowatch). This is a reasonable approach to determine where problems may possibly exist. The document states/confirms that potential is used in determining the "health threat radius". Therefore, this kind of document should only be used as a very first step to determine where problems may exist. Then, further studies like detailed/specific paper evaluations, review of ambient data, field inspections, and the OAQPS field measurements are used to determine if problems actually exist. Our findings have shown that we continue to achieve ambient air quality attainment, which is great news. Further, in the past several years, we have completed more compliance inspections to ensure that pollution control equipment is working as designed. However, the number of wells (and the potential of emissions) has justified increased inspectors being hired and even more inspections planned (I've pointed out in past emails that challenges still exist). We will use these resources to continue to monitor oil and gas operations, to minimize emissions, and to protect air quality in North Dakota.

Thank you,

From: Semerad, Jim L. <jsemerad@nd.gov>
Sent: Monday, June 10, 2019 1:00:09 PM
To: Fritz, Peter
Subject: RE: Air Pollution Tests

Mr. Fritz:

In addition to answers in red text below (see your email), I am copying Alex North at EPA Region 8 in Denver. Ms. North has significant experience and has been reviewing test reports, test results and inspections conducted by our office for many years. In addition, Ms. North has conducted oversight inspections and independent inspections throughout the state. Her contact information is:

Alexis North, Environmental Scientist
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Phone: 303-312-7005
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Also, it sounds like you have completed a good amount of research. If you haven't already visited the following websites, I recommend them: (https://airnow.gov/) (https://www.epa.gov/citizen-science)

Again, see red text below -- I hope this helps with your concerns.

Jim Semerad
Director, Division of Air Quality

701-328-5179 • 701-328-5185 (fax) • jsemerad@nd.gov • https://deq.nd.gov/

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From: Fritz, Peter <Ex. 6 Personal Privacy (PP)
Sent: Wednesday, June 05, 2019 12:47 PM
To: Semerad, Jim L. <jsemerad@nd.gov>
Subject: Air Pollution Tests

Mr. Semerad,

I have been reading a lot about the ND Industrial Commission (will not return communications). In addition, I have read multiple studies and the Prairie blog. Given all the information out there, I would like to see Billings and Stark county tested for concentrated methane, benzene (all variations) and formaldehyde levels. How can this be made a reality? Testing was conducted by EPA throughout the Bakken to determine if problems existed and, if they did, to determine priorities to address those findings. Test results pointed to specific wells that were leaking and found to have concentrations in the immediate vicinity of the wellsite that were directly correlated to leaks at the site. Further, those leaks were also seen with FLIR testing equipment used as SOP by both ND and EPA. Both ND and EPA worked with industry to fix leaks at oil wells and possible most importantly, to find/prevent leaks in the future. According to the EPA, both counties are in potential danger (above EPA carcinogen levels). Who would I have to contact or how does the process begin? Is there a process? If not, why? I am not aware of any EPA findings that show excessive concentrations exist. Some studies have used "potential" emissions based on conservative calculations; however, they are not representative of actual testing.

I have already come to the conclusion that I should not live in Stark Country with my three year old son. What is your recommendation? I am from Dickinson and have many family and friends currently living there. Based on our work and my 30+ years of experience, I believe that air quality in Dickinson is excellent. Further, independent studies support that conclusion (example is the American Lung Association. Lastly ND has consistently maintained compliance with EPA's clean air ambient air quality for the entire state --- we are one of a handful of states that can make that claim (more than half of the citizens in the US live in areas of nonattainment).

Thank you,